

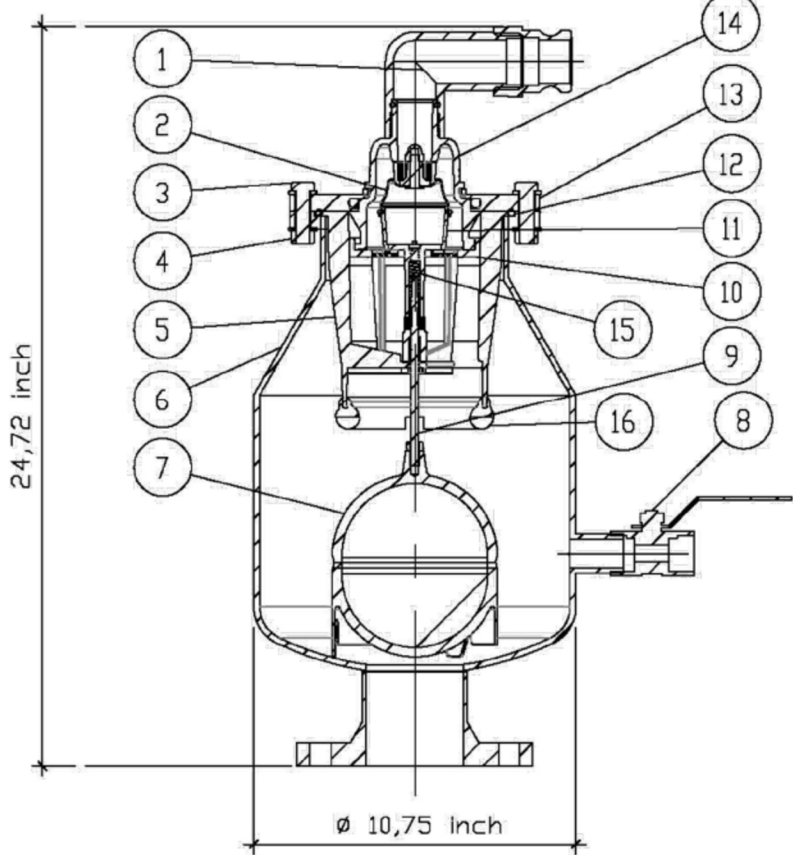
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- D. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST TEN FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM".
2. VERTICAL SEPARATION
- A. NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED GRAVITY-OR VACUUM-TYPE SANITARY SEWER OR STORM SEWER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST SIX INCHES, AND PREFERABLY 12 INCHES, ABOVE OR AT LEAST 12 INCHES BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
- B. NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER OR STORM WATER FORCE MAIN, OR PIPELINE CONVEYING REUSE WATER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 12 INCHES, ABOVE OR BELOW THE OUTSIDE, THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
- C. AT THE UTILITY CROSSINGS DESCRIBED IN PARAGRAPHS (A) AND (B) ABOVE, ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE. ALTERNATIVELY, AT SUCH CROSSINGS, THE PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORM WATER FORCE MAINS, OR PIPELINES CONVEYING REUSE WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY- OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING REUSE WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
- WHERE THE HORIZONTAL CAN BEING LOCATED LESS THAN THE REQUIRED MINIMUM DISTANCES FROM JOINTS IN THE OTHER PIPELINE OR THE HORIZONTAL IS LESS THAN THREE FEET FROM ANOTHER PIPELINE OR THE UNDER GROUND WATER MAIN IS CROSSING ANOTHER PIPELINE AND IS LESS THAN THE REQUIRED MINIMUM VERTICAL DISTANCE FROM THE OTHER PIPELINE, THE CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY FOR RECOMMENDED SOLUTIONS TO MEET THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION REQUIREMENTS PER CHAPTER 62-555, F.A.C.

## PROTECTION OF POTABLE WATER SUPPLY NOTES

ENGINEERING STANDARDS 2019			
REVISIONS		ENGINEERING DIVISION CITY OF POMPAÑO BEACH	POTABLE WATER SUPPLY NOTES
BY	DATE		
S.S.	01/12		
		SCALE: N.T.S.	DATE: JAN. 2012 DWG. NO. 122-3

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## AUTOMATIC AIR & VACUUM VALVE FOR POTABLE WATER

Model 986

Automatic Air and Vacuum Release Valve, steel - epoxy powder coated for operating range: 0-250 PSI (17.2 Bar)

Type	Size ANSI	Maximum Pressure PSI/Bar	Body Material	Overall Width B Inch/mm	Overall Height H Inch/mm	Weight Lbs./Kg
Thread	2" FNPT	250 PSI 17.2 Bar	Steel	10.75" 270 mm	23.2" 600 mm	50.7 lbs 23.0 Kg

ENGINEERING STANDARDS 2019			
REVISIONS		ENGINEERING DIVISION CITY OF POMPAÑO BEACH	H-TEC AIR AND VACUUM VALVE
BY	DATE		
		SCALE: N.T.S.	DATE: MAY 2014 DWG. NO. 123-1

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No.	Component	Series - Epoxy-coated steel
1	Outlet elbow w. screen/canlock 1.5"	Polyethylene (PE)
2	Diaphragm	Buna HNBR
3	Hex Head Bolt	Stainless Steel
4	Hexagon nut	Stainless Steel
5	Debris shield	Polyethylene (PE)
6	Body	Steel - epoxy powder coated
7	Float	Delrin®(PDM)
8	Ball valve, 1"	Stainless Steel
9	Float spindle	Stainless Steel 316Ti
10	Debris screen	Delrin®(PDM)
11	Diaphragm holder	Delrin®(PDM)
12	O-Ring 157 x 6 mm	Buna NBR
13	Clamping flange	Steel - epoxy powder coated
14	Upper air valve part	Delrin®(PDM)
15	Valve spring	Stainless Steel
16	Damper ring	Buna NBR

Automatic Air and Vacuum Release Valve, steel - epoxy powder coated (Model # 986).

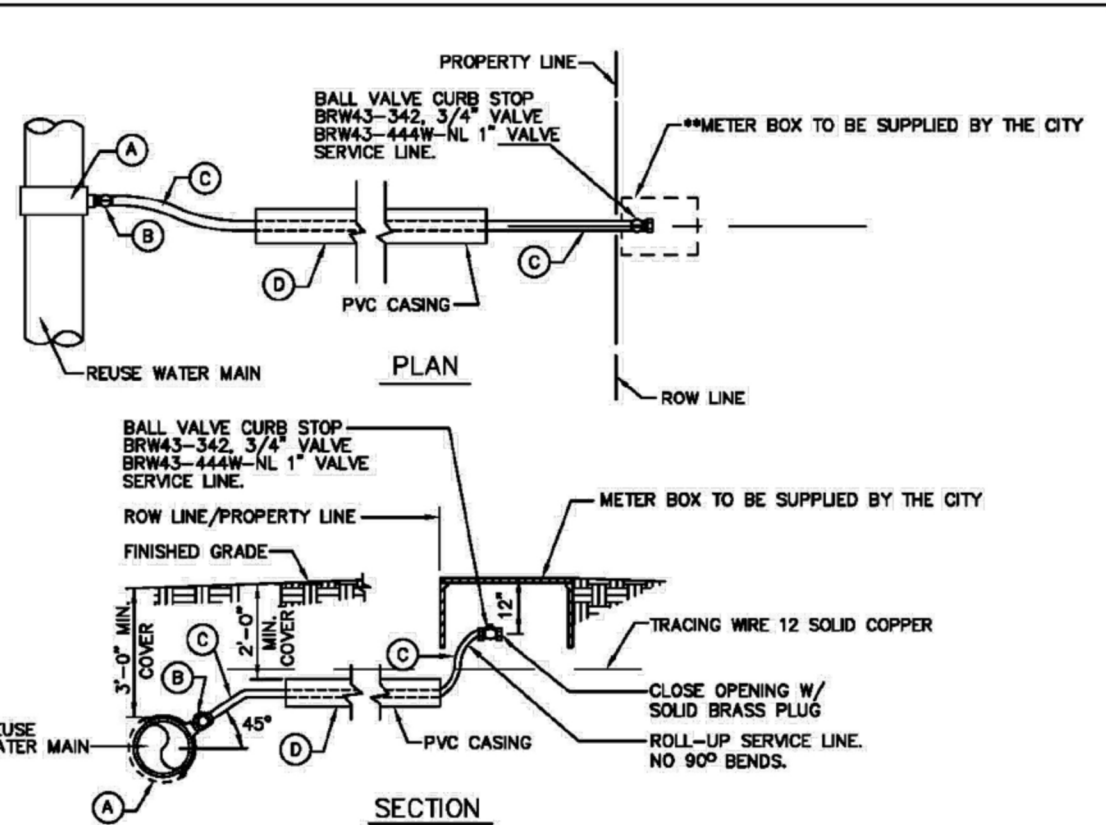
Automatic Air and Vacuum Valves shall be infinitely variable automatic air and vacuum valves designed to allow escape of air for a operating range starting from pressure range (0 through 250 psi (0 - 17.2 bar), allow air to enter in the event of a vacuum, and soft working behavior as water hammer inhibition realized by roll-on diaphragm and spring mechanism. A debris shield made of PE allows no contact between fluid and sealing area. A secondary debris screen provides an additional protection for the diaphragm. The float shall be Delrin (Polyoxymethylene, PDM); the valve seat and all working parts shall be of corrosion-resistant materials.

Air and vacuum valves shall be, from H-TEC, Inc. (Hawle company)

PAINT BODY OF THE VALVE BLUE USING AN EXPOXY PAINT.

ENGINEERING STANDARDS 2019			
REVISIONS		ENGINEERING DIVISION CITY OF POMPAÑO BEACH	H-TEC AIR AND VACUUM VALVE MATERIALS OF CONSTRUCTION
BY	DATE		
		SCALE: N.T.S.	DATE: MAY 2014 DWG. NO. 123-2

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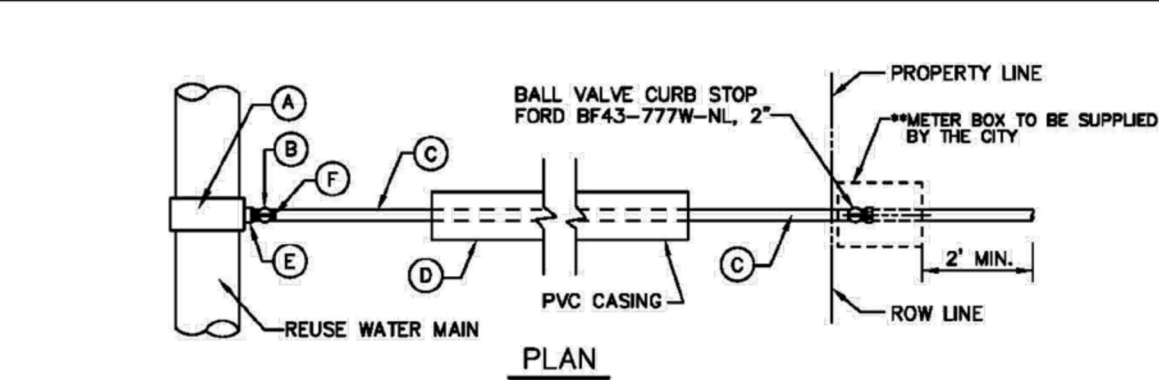
## REUSE WATER SERVICE LINES

- (A) 1" TAPPING SADDLE FORD FC202-690-CC4 (6"x1") FC202-903-CC4 (8"x1")
- (B) 1" CORPORATION STOP FORD TYPE F1002-4
- (C) 1" POLYETHYLENE PURPLE PIPE.
- (D) 1 1/2" SCH. 40, PURPLE CASING MATERIAL.

## TYPICAL 3/4" AND 1" REUSE WATER SERVICE

ENGINEERING STANDARDS 2021			
REVISIONS		ENGINEERING DIVISION CITY OF POMPAÑO BEACH	1" REUSE WATER SERVICE
BY	DATE		
A.S.	08-2021		DATE: MAY 2012 DWG. NO. 506-1
		SCALE: N.T.S.	

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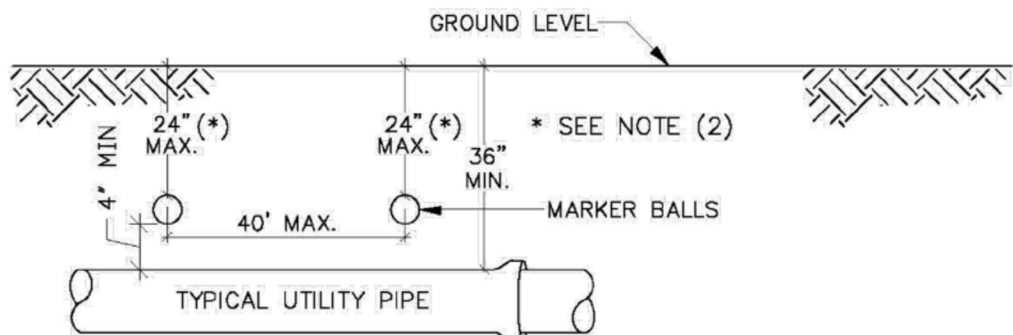


- (A) 2" TAPPING SADDLE IRON PIPE THREADED FORD FC-202 OR EQUAL.
- (B) 2" RESILIENT SEATED GATE VALVE CLOW F81-03 MUELLER A-23-60-B 2 1/2" OPERATING NUT BOXED TO GRADE - TYLER S 1/4" VALVE BOX
- (C) 2" POLYETHYLENE PURPLE PIPE
- (D) 2 1/2" SCH. 40, PURPLE CASING MATERIAL
- (E) 2" x 3" BRASS NIPPLE
- (F) 2" MIP COUPLING C-84-77 - PACK JOINT - CTS

## TYPICAL 1 1/2" AND 2" REUSE WATER SERVICE

ENGINEERING STANDARDS 2021			
REVISIONS		ENGINEERING DIVISION CITY OF POMPAÑO BEACH	2" REUSE WATER SERVICE
BY	DATE		
S.S.	11-2018		
A.S.	08-2021		
		SCALE: N.T.S.	DATE: NOV. 2012 DWG. NO. 506-2

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## GENERAL NOTES:

- ALL UTILITY PIPE SHALL BE INSTALLED WITH 4"Ø MARKING BALLS PLACED EVERY 40' AND AT EVERY FITTING, FOR IDENTIFICATION AND WARNING PURPOSES, BURIED ABOVE THE PIPE AT A MAXIMUM DEPTH OF 24 INCHES OR AS APPROVED BY THE OWNER. IT SHALL BE COLOR CODED AND WORDED AS FOLLOWS:  
  
REUSE WATER:  
A. COLOR: PURPLE (PANTONE 522C)  
B. LETTERING: NON-POTABLE WATER  
C. FREQUENCY OF MARKER BALLS SHALL BE 66.35 KHz.  
D. THE MARKER BALLS CAN BE BURIED IN ANY ORIENTATION.

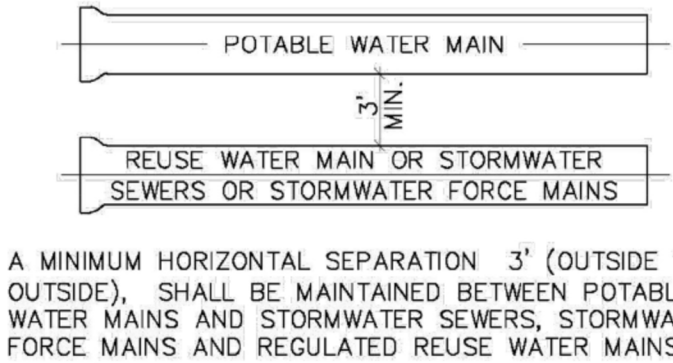
THE MARKER BALLS SHALL BE DETECTABLE BY STANDARD METAL DETECTION EQUIPMENT AND SHALL BE MANUFACTURED BY TEMPO OR 3M LOCATOR SYSTEM OR EQUIVALENT (FREQUENCY 66.35 KHz )

- FOR LARGE DIAMETER PIPE INSTALLED AT DEPTHS BELOW 4'-0" MARKER BALLS SHALL BE PLACED AT A MAXIMUM DEPTH OF 4'-0" BELOW GRADE \*

## REUSE WATER PIPE IDENTIFICATION

ENGINEERING STANDARDS 2019			
REVISIONS		ENGINEERING DIVISION CITY OF POMPAÑO BEACH	REUSE WATER PIPE IDENTIFICATION
BY	DATE		
TCW	09/07		
SS	05/08		
		SCALE: N.T.S.	DATE: MAY 2007 DWG. NO. 511-1

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A MINIMUM HORIZONTAL SEPARATION 3' (OUTSIDE TO OUTSIDE), SHALL BE MAINTAINED BETWEEN POTABLE WATER MAINS AND STORMWATER SEWERS, STORMWATER FORCE MAINS AND REGULATED REUSE WATER MAINS.

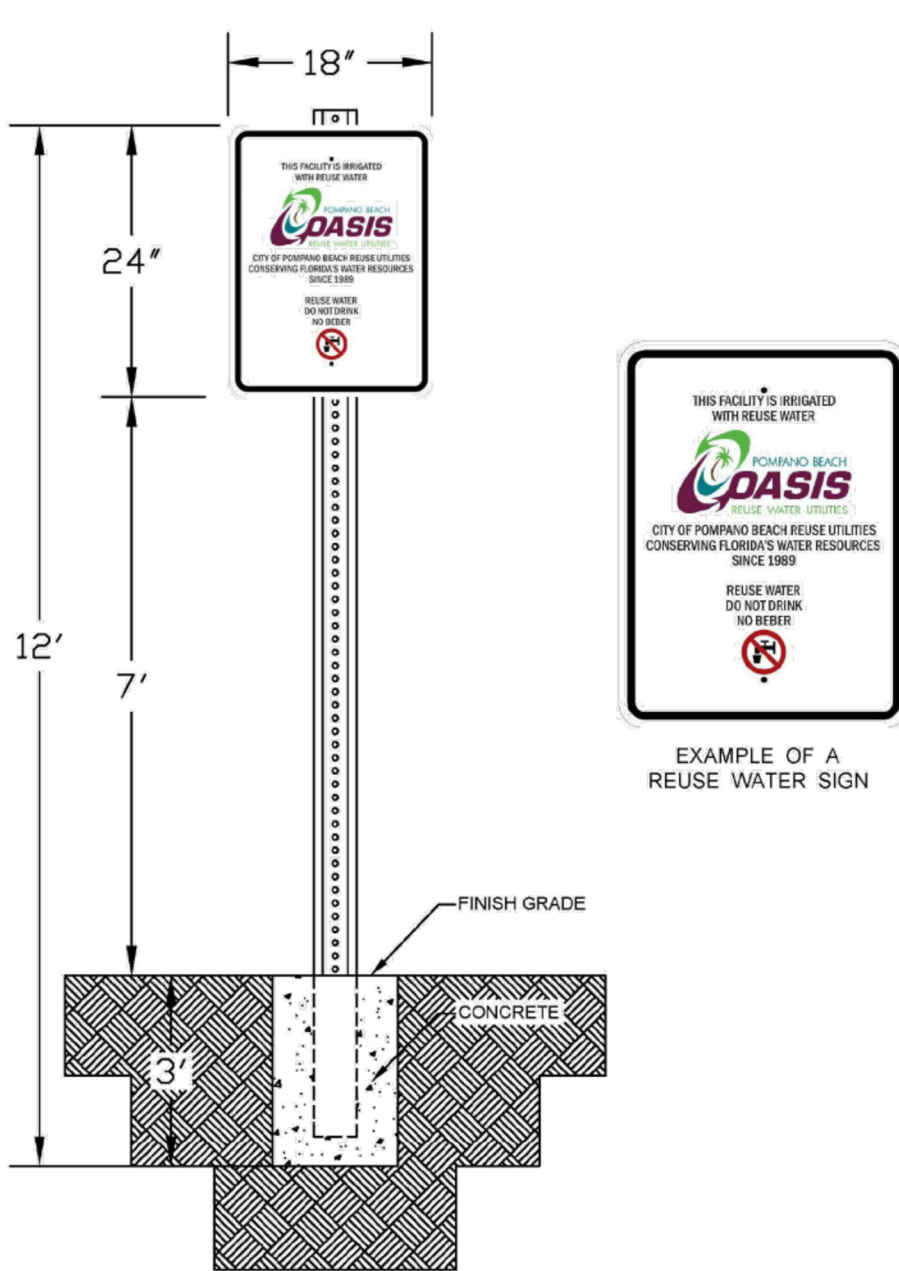
A MINIMUM HORIZONTAL SEPARATION 3' (OUTSIDE TO OUTSIDE), SHALL BE MAINTAINED BETWEEN EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER. \* SEE NOTE D(1)(B).

A MINIMUM HORIZONTAL SEPARATION OF 6' (OUTSIDE TO OUTSIDE), SHALL BE MAINTAINED BETWEEN POTABLE WATER MAINS AND EXISTING OR PROPOSED GRAVITY-OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN OR NOT REGULATED REUSE WATER MAIN. \*\* SEE NOTE D(1)(C).

## MINIMUM HORIZONTAL SEPARATION REQUIREMENTS FOR POTABLE WATER, REUSE, STORMWATER AND SEWER LINES

ENGINEERING STANDARDS 2019			
REVISIONS		ENGINEERING DIVISION CITY OF POMPAÑO BEACH	MIN. HORIZONTAL SEPARATION FOR REUSE WATER
BY	DATE		
		SCALE: N.T.S.	DATE: MAY 2007 DWG. NO. 513-1

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## REUSE WATER SIGN

ENGINEERING STANDARDS 2019			
REVISIONS		ENGINEERING DIVISION CITY OF POMPAÑO BEACH	REUSE WATER SIGN
BY	DATE		
T.W.	10-2010		
		SCALE: N.T.S.	DATE: 10/19/10 DWG. NO. 521-1

OWNER | DEVELOPER:



DESIGN + BUILD CONTRACTOR:



DESIGN CONSULTANT:



ARCHITECT OF RECORD:

RUBEN J. PUJOL  
A.R.C.H.I.T.E.C.T.  
A.I.A. # 0010458  
PHONE: (305) 968-2155  
12237 S.W. 204 TERRACE  
MIAMI, FLORIDA 33177

SIGN AND SEAL:



Digitally signed by Fabio J Delgado De Michele  
Date: 2023.06.16 19:59:37 -04'00'

REVISIONS/COMMENTS:

PROJECT:

324 HAUS  
MIXED USE | FLEX BUILDING  
324 NW 6TH STREET  
POMPAÑO BEACH, FL 33060

PROJECT NO.: 22-031

DRAWN BY:

DATE: JULY- 2022

SHEET NAME:

WATER AND SANITARY SEWER DETAILS

DRC  
P222-12000032  
07/19/2023